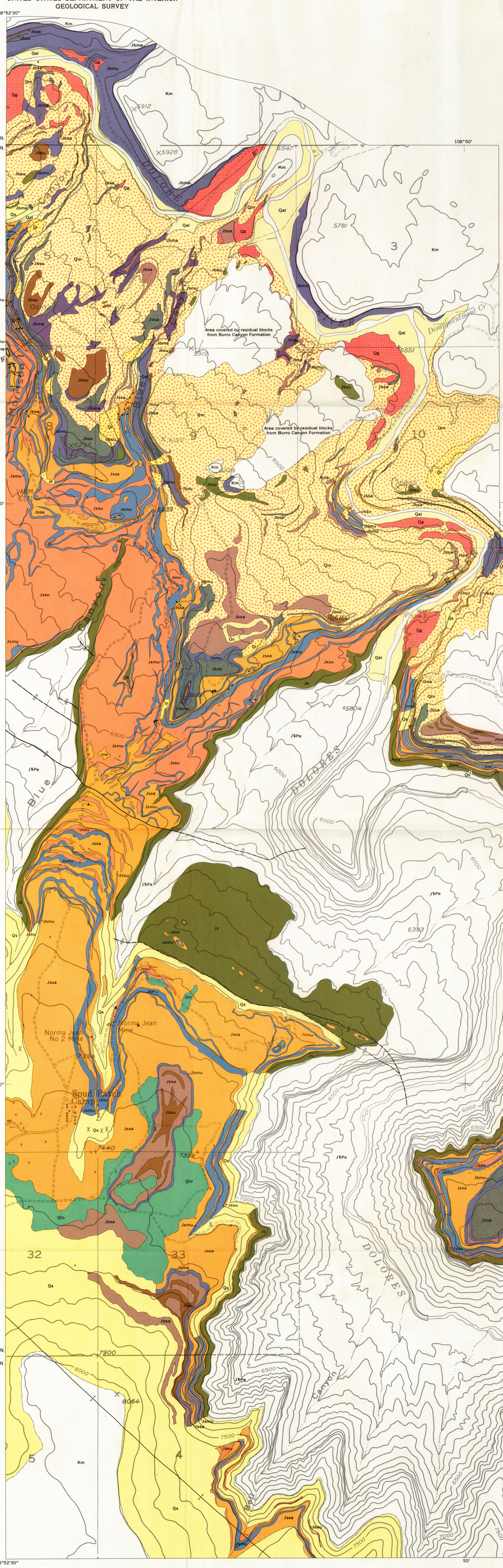
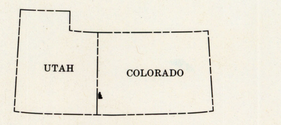
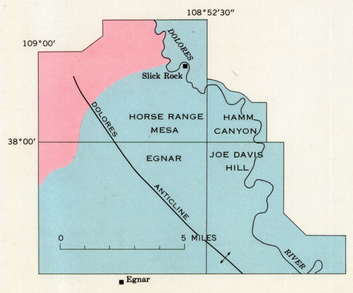


Base from U.S. Geological Survey
1:24,000, 1948–49



LOCATION OF MAPPED AREA



INDEX TO GEOLOGIC MAPPING AND U.S. GEOLOGICAL SURVEY TOPOGRAPHIC QUADRANGLES USED FOR BASE

Geology mapped by N. L. Archbold

Geology mapped by D. R. Shawe

EXPLANATION

QUATERNARY

Pleistocene and Recent

Qal — Alluvium
Fan gravels and stream deposits of clay, silt, sand, and gravel

Qlo — Loess
Light-reddish-brown; includes some residual soil

Qm — Mantle
Unstratified slope deposits, chiefly below Burro Canyon Formation; includes some talus

Ql — Landslide deposits
Unstratified heterogeneous mixtures of angular rock fragments chiefly on slopes of Brushy Basin Member

Qs — Surficial deposits, undifferentiated
Includes mantle and landslide deposits

Qg — Terrace gravel
Poorly sorted gravel and sand containing abundant cobbles. Largely volcanic rocks

UNCONFORMITY

CRETACEOUS

Lower and Upper Cretaceous

Km — Mancos, Dakota, and Burro Canyon Formations

JURASSIC

Upper Jurassic — Morrison Formation

Jbmu, Jbma, Jbsu, Jbsa — Brushy Basin Member
Mudstone:
Jbmu, *interbedded, reddish-brown, unaltered*
Jbma, *gray to greenish-gray, altered*
Sandstone; lenses are commonly conglomeratic, shown by dotted pattern:
Jbsu, *light-red to reddish-brown, unaltered*
Jbsa, *gray to yellow-brown, altered*

Jsmu, Jsma, Jssu, Jssa — Salt Wash Member
Mudstone:
Jsmu, *interbedded, reddish-brown, unaltered*
Jsma, *gray to greenish-gray, altered*
Sandstone; uppermost persistent sandstone layer contains most of the uranium-vanadium deposits:
Jssu, *light-red to reddish-brown, unaltered*
Jssa, *gray to yellow-brown, altered*

Js — Summerville Formation
Reddish-brown siltstone and silty sandstone

PERMIAN TO JURASSIC

JŦPe — Entrada, Carmel, Navajo, Kayenta, Wingate, Chinle, and Cutler Formations

Contact
Only formation and member boundaries are dashed where approximately located. Lithologic unit boundaries are shown as solid but locally are approximately located. Alteration boundaries are shown as solid but all are approximately located

Fault, showing dip
Dashed where approximately located; dotted where concealed. U, *upthrown side;* D, *downthrown side*

Axis of Dolores anticline

Strike and dip of beds

Vertical joint

Nearly vertical joint with dip undetermined

Joint, showing dip

Fossil log, showing orientation

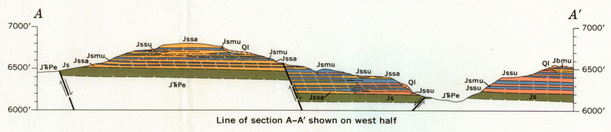
Current lineation

Altered rocks along joints

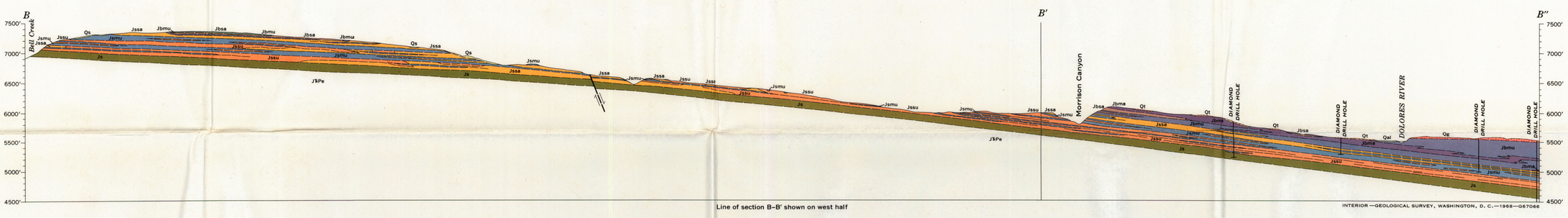
Mine

Adit

Prospect with uranium and vanadium minerals showing



Line of section A–A' shown on west half



Line of section B–B' shown on west half

INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C.—1968—G67066

GEOLOGIC MAP OF THE MORRISON AND SUMMERVILLE FORMATIONS IN PART OF THE SLICK ROCK DISTRICT SAN MIGUEL COUNTY, COLORADO (EAST HALF)

TRUE NORTH
MAGNETIC NORTH
14°
APPROXIMATE MEAN DECLINATION, 1968

SCALE 1:12 000

0 ½ 1 MILE

0 .5 1 KILOMETER

CONTOUR INTERVAL 100 FEET
DATUM IS MEAN SEA LEVEL